

Attachment #1

FIRST DRAFT

Revised – 1996 WSDOT Bicycle and Pedestrian Transportation Plan

Bicycling and walking play a big role in Washington's transportation. People walk and bike to work and school, for shopping or other personal errands, and to make connections to transit.

Washington leads the country in miles of off-road bicycle and pedestrian trails with a total of 970 miles. State and regional trails, especially in urban and some ex-urban areas, have become a key feature of the pedestrian infrastructure. In Seattle alone, there are over 28 miles of trails.

Seattle also boasts 90 miles of signed bicycle routes and 15 miles of striped bicycle lanes primarily on the local arterial system. There are over 2,000 miles of signed bicycle routes and 60 miles of striped bicycle lanes on the state highway system with another 380 miles in the planning stages.

Most of us are pedestrians at one time or another every day. The density and quality of sidewalks and paths is generally better in the urban areas of the state and degrades as one moves from the urban to the rural environment. For example, in urban areas, the state system provides 240 miles of sidewalk while there are rarely sidewalks in suburban or rural areas. Outside the urban areas, on average, there is an opportunity to cross the state highway in a marked pedestrian crossing less than every 20 miles. Within urban areas there are marked crossing opportunities about every 8 miles on average.

Travel by Bicycle and On Foot

Bicycle and pedestrian trips are about 3.5 percent of all trips in Washington. In many areas of the state, walking and bicycling have more significant numbers of users. In the Puget Sound, over 5 percent of all trips are biking or walking trips. In Downtown Seattle, 16 percent of commute trips are walking and bicycling trips. In some parts of the city, bicycling and walking make up over 20 percent of the commute trips.

BICYCLE TOURISM

Based on recent trends, WSDOT estimates that approximately 250,000 bicyclists board Washington State Ferries annually. They are heading for touring destinations all around the Puget Sound. Additionally, bicycle touring generates over \$5 million annually for the state of Washington.

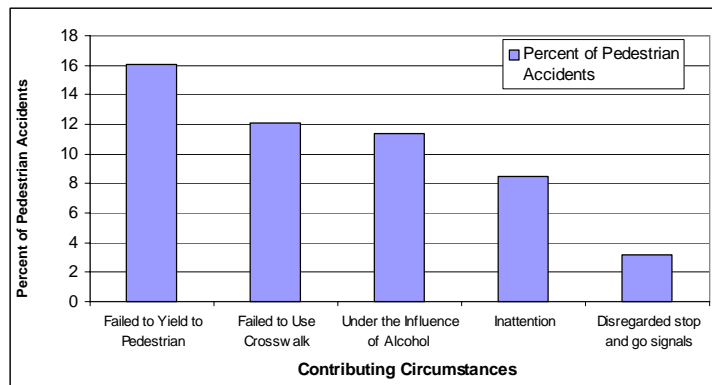
Pedestrian Safety

Washington's pedestrian fatality rate was 18th lowest nationally in 2001. A total of 74 pedestrian fatalities occurred on all roadways statewide with 28 fatalities on state highways. Accident trends show a slight decline in the frequency of pedestrian fatalities per 100,000 people over the past six years.

Although evaluation of pedestrian fatalities is important, they do not necessarily reflect systemic problems. Evaluation of all pedestrian collisions, including injuries and disabling injuries, is necessary to understand pedestrian safety problems.

The graphs below show the top five most frequent contributing factors in pedestrian accidents. For drivers, failure to yield and inattention are two major contributing circumstances in pedestrian collisions, and for pedestrians, failure to yield and failure to use crosswalks are two major contributing circumstances.

Top 5 Contributing Factors For Pedestrians
in Vehicle/Pedestrian Accidents 1996-2001



Further investigation of these numbers reveals that of the 291 pedestrian deaths on Washington state highways from 1993 to 2001, alcohol was involved in approximately 40%. Possible explanations for pedestrian accidents include: roadway width, poor illumination, high volumes of traffic, poor pedestrian facilities, lack of access management. Additionally, recent research shows that 80% of high pedestrian accident locations occur within 100 feet of a transit stop.¹

Pedestrians and Transit

Based on a recent study conducted with University of Washington, several statistical relationships were determined to be significant. Bus stop usage was correlated with pedestrian accidents. When bus stop usage increases by 10 people, it increases the odds of that location becoming a pedestrian accident location by 1.5.

¹ University of Washington, Washington State Transportation Center (TRAC). *Pedestrian Safety and Transit Corridors*. UW TRAC. December 2002.

The addition of 10,000 vehicles a day increases the odds of that location becoming a pedestrian accident location by 1.8. For each new lane on a road, the odds that the location will become a pedestrian accident location is 15.3 times larger.

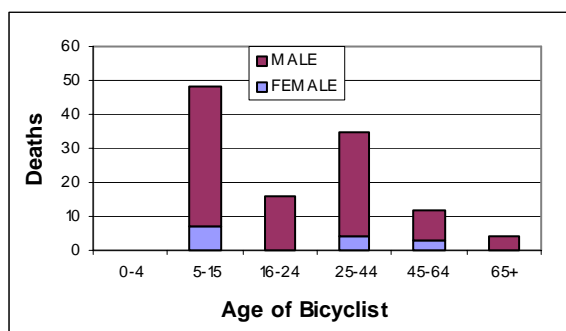
The research makes it clear that facilities with high numbers of bus boarding or alighting should be designed for pedestrians, allowing people to safely walk along and across the roadway. WSDOT and transit staff must work together to identify facilities and locations where bus riders are at risk and take appropriate steps to insure pedestrian safety. Programs to develop multi-modal facilities and major regional facilities within local suburban communities need to understand the role of transit in shaping the demand for non-motorized travel on the facilities.

Bicycle Safety

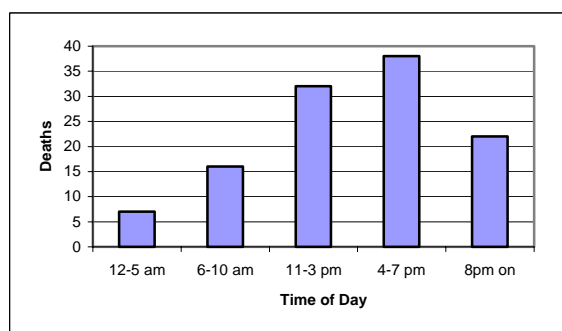
Washington ranked 16th lowest in bicyclist fatality rates in 2001, compared to other states. Eight bicyclists were killed on Washington state highways in 2001. In addition, there were more than 200 reported accidents involving bicyclists, including disabling injury accidents. This may be the tip of the iceberg: a recent FHWA study of hospital emergency department data indicates that between 40 and 60 percent of all bicycle accidents are not captured in highway reporting data.

The data also shows that certain bicycle user groups are at higher risk including teenagers, males, and bicycle commuters.

Bicycle Fatalities by Sex and Age Group
1993-2001



Bicycle Fatalities by Time of Day
1993-2001



Goals and Objectives

Past planning efforts at the state level have identified two primary bicycle and pedestrian issues that are also consistent with federal guidance. The two issues serve as the foundation for the objectives in this plan— increasing (1) the numbers of people and (2) the safety of people bicycling and walking.

THE TWO PRIMARY GOALS FOR BICYCLING AND WALKING IN WA:

1. increase nonmotorized transportation to at least 15 percent of all trips, and
2. simultaneously reduce the number of bicyclists and pedestrians killed or injured in traffic crashes by at least 10 percent.

GOAL: Increase nonmotorized transportation to at least 15 percent of all trips.

OBJECTIVE: IMPROVE BICYCLE AND PEDESTRIAN FACILITIES

This objective focuses on updating design manuals to incorporate bicycle and pedestrian facilities, providing technical assistance to local agencies, preservation of linear corridors, and targeting funding to remove barriers that improve access for bicycling and walking.

- A. Local, Regional and State governments should designate bicycle and pedestrian priorities.
- B. WSDOT and local governments should continue to work together to modify the *Manual for Uniform Traffic Control Devices* and *Local Agency Guidelines* manual to incorporate bicycle and pedestrian facility practices.
- C. WSDOT, other state agencies, and regional and local governments should preserve linear corridors for bicycle and pedestrian transportation purposes.
- D. WSDOT should update its *Design Manual* and operational practices to incorporate contemporary bicycle and pedestrian facility practices.
- E. WSDOT should target its bicycle and pedestrian funding to bicycle and pedestrian priorities that remove barriers on the state system and improve access to local bicycle and pedestrian networks.
- F. WSDOT should continue to provide technical assistance to local agencies on bicycle and pedestrian facility design and site location.

OBJECTIVE: INCREASE PUBLIC EDUCATION

This objective encourages walking and bicycling for nonwork trips and promotes land use that encourages pedestrian and bicycle trips.

- A. State and local governments should promote the concept of using bicycle and pedestrian travel to access activity centers, employment centers, and modal centers.
- B. WSDOT and local governments should continue to distribute bicycle and pedestrian information through such technologies as Internet, and a bicycle/pedestrian hotline.
- C. WSDOT should continue to find ways to work with Department of Health, Community Trade and Economic Development, Office of the Superintendent of Public Instruction, Washington Traffic Safety Commission, and Washington State Patrol to promote bicycle and pedestrian safety, particularly in the areas of improving safe routes to schools and safety for older road users.

- D. WSDOT should continue to promote bicycling by completing the rural bicycle touring route system.

OBJECTIVE: IMPROVE INTERMODAL CONNECTIONS

This objective focuses on incorporating bicycling and walking into all intermodal facilities and encourages agencies to fund and prioritize projects which include bicycle and pedestrian facilities that link bicycle and pedestrian origins and destinations.

- A. WSDOT should work with local agencies to ensure intermodal facilities such as transit centers, airports, and park and ride lots should include safe and convenient access for bicyclists and pedestrians.
- B. WSDOT should work with local school districts to ensure safe walk routes exist between schools and their adjacent neighborhoods.
- C. WSDOT, in cooperation with federal and local governments, should ensure passenger rail terminals provide safe and convenient access for bicyclists and pedestrians.
- D. WSDOT should ensure its intermodal connections (ferry terminals, park and ride lots) provide safe and convenient access to bicyclists and pedestrians.
- E. WSDOT should work with local agencies and advocacy groups to pursue funding for nonmotorized needs.

GOAL: Reduce the number of bicyclists and pedestrians killed or injured in traffic crashes by at least 10 percent.

OBJECTIVE: FOCUS EFFORTS TO IMPROVE HIGH RISK LOCATIONS

This objective focuses on incorporating bicycle and pedestrian safety into all WSDOT projects and programs.

- A. WSDOT should work towards a proportionate distribution of safety funds (e.g, bicycle and pedestrian fatalities = 14% of all fatalities. However, bicycle and pedestrian safety funding is currently receives about 1% of safety funding).
- B. WSDOT should work to identify and incorporate into design policy appropriate countermeasures and pedestrian treatments for specific roadway circumstances and conditions, particularly in the areas of schools, transit connections, roadway crossings, and areas with high older adult populations.
- C. WSDOT, schools, and local governments should continue to provide safety education materials to students in K-12 and targeted population groups on appropriate pedestrian and bicycle actions.
- D. With the additional requirements of the MUTCD related to bicycle and pedestrians in work zones (Section 6D), WSDOT should coordinate with Washington State Traffic Safety Commission, Washington State Patrol, Office of the Superintendent of Public Instruction, and the Department of Health to provide bicycle and pedestrian safety education to targeted population groups within WSDOT project areas.
- E. WSDOT and the Department of Licensing should work together to include more information in the driver's manual and exam on correct traffic procedures between drivers and bicyclists or pedestrians.

Costs for the State Bicycle Transportation and Pedestrian Plan

Meeting the goals and objectives requires substantial efforts by state and local governments, the private sector, and volunteer groups. Costs for meeting the bicycle and pedestrian objectives were estimated based on a sampling of local jurisdictions 20-year bicycle and pedestrian needs. The spending estimates include costs for bicycle and pedestrian facilities, education programs, enforcement efforts, and other programs.

Currently, there are few dedicated sources of revenue targeted for bicycle and pedestrian needs. The bulk of pedestrian and bicycle projects have been funded through regional allocations of federal transportation dollars or federal aid grants.

State and Local Costs

Based on local agency surveys, costs for meeting the bicycle and pedestrian project needs is about \$1.5 billion. Based on these surveys and spending trends, WSDOT estimates a **\$30 million need each biennium for the planning horizon.**

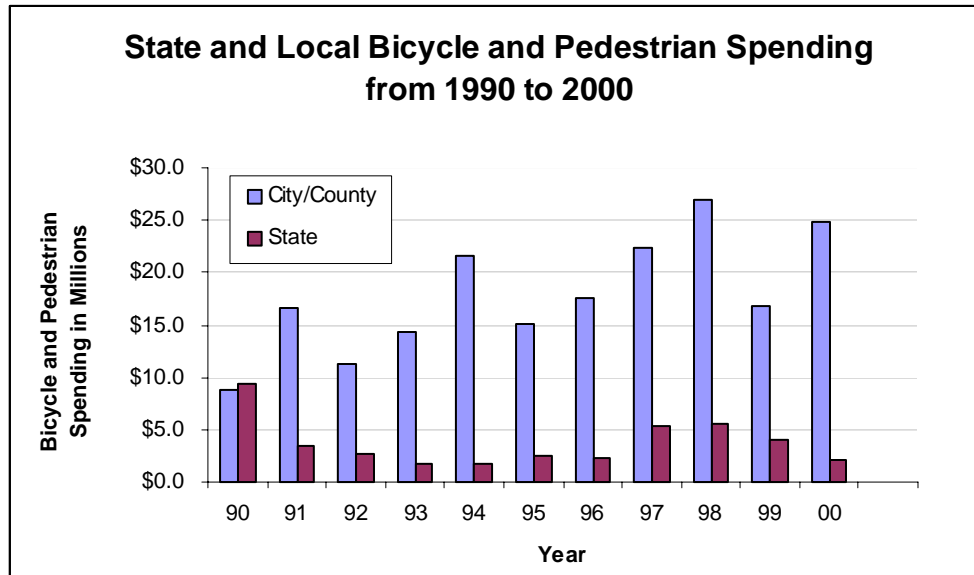
History of Non-Motorized Policy and Finance

State involvement in non-motorized transportation began with the creation of the Paths and Trails Law (RCW 47.30) which requires the WSDOT and local agencies to spend a minimum dollar amount on path and trails. In 1984 the department created a bicycling advisory committee to provide advice on bicycle issues. Since the early 1980's the WSDOT has had a Bicycling Advisory Committee (BAC) to advise the department on bicycle transportation facilities, matters, and programs. In 2002, this committee added pedestrian experts to its membership and assumed the additional role of addressing pedestrian safety and other pedestrian issues.

In 1991 the Washington State Policy Plan examined bicycle transportation issues. In 1994 the Washington State Policy Plan investigated ways of incorporating pedestrian travel into the transportation system.

The Spring 1991 Washington State Legislature created a Bicycle and Pedestrian Program Manager within WSDOT. Another state law was enacted that requires a Statewide Multimodal Transportation Plan, including a bicycle and pedestrian. Washington's Transportation Plan (WTP) was developed to meet the requirements of the state law and ISTEA planning requirements.

That same year, the legislature enacted a Growth Management Act. It emphasizes sound land use planning that ultimately benefits bicyclists and pedestrians. The legislature also enacted the Commute Trip Reduction Law, which sets goals for dramatically reducing single occupant vehicles at large employee sites.



Traditional sources of transportation revenues, including federal and state gas taxes and local government general taxes, have been and can be used for pedestrian and bicycle facilities.

FEDERAL FUNDING SOURCES

Bicycle and pedestrian facilities, as part of a highway construction project, are eligible expenditures.

Additionally, a significant portion of the federal Transportation Enhancement funds Washington receives have been spent by local agencies on bicycle and pedestrian projects.

STATE FUNDING SOURCES

Per the Paths and Trails Law (RCW 47.30), WSDOT is required to spend 0.3% of the state and federal construction budget for non-motorized trails and paths.

LOCAL FUNDING SOURCES

The Paths and Trails Law (RCW 47.30) requires cities and counties to spend a minimum of 0.5% of their gas tax funding for non-motorized paths and trails. Cities and towns whose trails and paths amount to less than \$500 per year are exempted from the requirement. Counties whose trails and paths amount would be less than \$3,000 per year are also exempted.

Cities and towns can license and regulate bicycles, construct and maintain bicycle paths, as well as establish and expend funds for bicycle purposes (RCW 35.75).